The Second Species of Psectrothrips (Thysanoptera: Thripidae)

By LEWIS J. STANNARD, JR., Illinois Natural History Survey, Urbana, Illinois

The previously monobasic genus *Psectrothrips* was erected for a large thrips with a greatly elongated, *Ctenothrips*-like head outline. So remarkable is the appearance of this species, the genotype *dclostomae* Hood, that, in the process of placing the new short headed species herein described, I nearly ruled out the possibility that it might belong in *Psectrothrips*. Not only are the two species quite different in gross appearance but also seemingly in their habits and geographic locations. Both species live isolated from one another, *dclostomae* in Peru and *beckeri* sp. nov. in Honduras; and as far as is known, both frequent different host flowers, *Delostoma dentatum* and *Cornutia grandifolia*, respectively.

Actually, however, as will be pointed out, the structural differences of the two species are not of great magnitude despite first impressions. Also their present isolation is not extremely great for the two home ranges are on land masses that were connected possibly in the Cretaceous and almost certainly in the Oligocene, Miocene, and Pliocene (Simpson, 1950). Then, too, their life zones have always been tropical, and their hosts belong in the same plant order according to Johnson (1931), or in two closely related orders according to Bessey (1915).

Because of the prolonged head form of *delostomae*, *Psectrothrips* was originally considered to be related to *Ctenothrips* which has a head similarly shaped. Now with the discovery of the second species with another type of head, it is necessary to add the genera *Frankliniella* and *Taeniothrips* and others as relatives. Certainly the head of *beckeri* would be difficult to separate from some of the species in the two aforementioned genera in shape and in details of setal arrangements and sculpture. Besides, *Taeniothrips* parallels *Psectrothrips* in containing species with radically divergent heads such as *T. orionis*, long with bulging eyes, versus *T. simplex* with its short transverse head. Perhaps the long head of *delostomae* is in part an expression of heterogonous growth correlated with the factors that have produced a larger body as well.

In adding *beckeri*, the following six characteristics now seem to me to be the principal ones for the recognition of *Psectrothrips:*

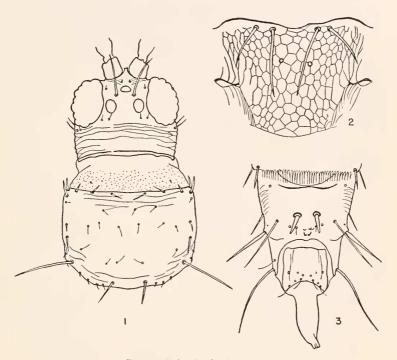
- 1. Antennae 9 segmented. See Hood, 1937, p. 265, fig. 2, c.
- Prothorax with but a single pair of very long setae situated one on each of the posterior angles, fig. 1. Also see Hood, 1937, p. 265, fig. 2, a.
- 3. Abdominal tergum 7 with a complete or nearly complete, even comb of setae across the posterior border in addition to the comb on segment 8 and the partial lateral combs on several other segments. See Hood, 1937, p. 265, fig. 2, b.
- 4. Fore wings with a nearly even and closely set row of setae on both longitudinal veins, as similarly found in *Frankliniella*.
- 5. Metanotum hexagonally reticulate, fig. 2, somewhat as in *Isoneurothrips* and *Ctenothrips*.
- 6. Abdominal tergum 9 of the males with a pair of stout thornlike spines, fig. 3, similarly as in males of *Frankliniclla* and others.

Most of the other characters mentioned in the original description (Hood, 1937) apply equally to the two species. The above new concept, however, deemphasizes the large size, the long head, the pair of strong antero-lateral prothoracic setae, and the noninterruption of the seventh abdominal posterior comb. Structures of the latter kind serve to distinguish only the genotype. *Psectrothrips* can be set apart from all of the genera in the Thripidae by the combination of three characteristics, i.e., the antennal form, the abdominal combs, and the prothoracic setation, although these same characters individually may be found scattered in a number of genera.

Psectrothrips beckeri sp. nov.

In naming this species, a distinctive thysanopteron, I am pleased to have the opportunity to honor my friend Mr. Edward C. Becker, a coleopterist, who went far out of his way to bring back one of the finest collections of thrips ever to come from Central America. This species is but one of the many in the Becker Collection which was donated to the Illinois Natural History Survey.

Female (macropterous).-Length of body, exclusive of antennae, distended, nearly 2 mm. Color almost entirely darkish



Psectrothrips beckeri sp. nov.

Fig.	1.	Dorsal aspect of head and prothorax.	
Fig.	2.	Reticulations of metanotum.	
Fig	2	Terminal abdominal terms of male	

Fig. 3. Terminal abdominal terga of male.

brown underlain with yellowish subdermal pigments, pedicel of third antennal segment, extremities of legs and lateral portions of metathorax lighter to nearly yellow, setae blackish brown, forewings grayish brown with a lighter streak between the veins and lighter at the base beyond the scale, hind wings pale gray with a median longitudinal dark stripe. Head as in fig. 1, wider (through eyes) than long, postocular setae reduced to minute

lxii]

[Oct., '51

size. Prothorax as in fig. 1, differing from *delostomae* in that the two pairs of antero-lateral setae are about the same length (subequal to the mid laterals). Mesonotum with transverse striations. Abdominal sterna without median setae in addition to the setae along the posterior margin. Seventh abdominal comb interrupted in the middle in the holotype specimen but complete in some of the paratypes.

Male (macropterous).—Length of body, exclusive of the antennae, distended, about 1.6 mm. Generally similar to female except somewhat lighter in color especially in the legs. Oblong glandular areas on the forward median region of the abdominal sterna; by contrast, males of *delostomae* (according to Priesner's key, 1949) possess square shaped glandular areas.

Holotype.—Female; La Ceiba, HONDURAS; July 9, 1949; (E. C. Becker); on *Cornutia grandifolia* (determined by Dr. Paul C. Standley for Mr. Becker).

Allotype.---Male, same data as above.

Paratypes.—7 \bigcirc and 12 \Diamond , same data as above, mounted on slides; 6 \Diamond , same data as above except May 14, 1949, preserved in alcohol.

The holotype, allotype and a portion of the paratypes are deposited in the Illinois Natural History Survey. The remaining paratypes will be distributed to the California Academy of Sciences, the Philadelphia Academy of Natural Sciences, the United States National Museum, and to the Collection of Prof. Dr. Hermann Priesner of Cairo, Egypt.

All of the 21 specimens in the mounted type series show considerable variation in the number of setae of each of the veins of the fore wings and in the extent of the comb on the seventh abdominal segment. No individual of either sex bears the same number of vein setae on the right and left forewings. These vein setae range in number from 22 to 16 on the anterior vein and from 17 to 11 on the posterior vein. Generally the tendency is for a complete seventh abdominal comb although the median area of the comb occasionally lacks setae, particularly in the female.

Except for the comparative remarks made in the description and in the introduction, no further analysis of the two species can be made at this time since I have never seen specimens of *delostomae.* The published illustrations of these species provide sufficient reference points for their separation one from another.

References

- Bessev, C. E. 1915. The phylogenetic taxonomy of flowering plants. Ann. Mo. Bot. Gard. 2: 118. Chart of the relationships of plant orders.
- Hoop, J. D. 1937. Studies in Neotropical Thysanoptera. IV. Rev. de Ent. 7 (2 & 3): 262-267, fig. 2. Original description of *Psectro*thrips and the genotype *P. delostomac*.
- JOHNSON, A. M. 1931. Taxonomy of the flowering plants. The Century Co., New York. P. 499. A listing of the families belonging to the order Tubiflorae.
- PRIESNER, H. 1949. Genera Thysanopterorum. Keys for the identification of the genera of the order Thysanoptera. Bull. de la Soc. Fouad 1^{er} d'Ent. 33: 48. Description of male glandular area of *P. delostomae*.
- SIMPSON, G. G. 1950. History of the fauna of Latin America. American Scientist 38 (3): 361-389. Zoogeography and certain landbridges.

A New Mite from Nests of the Wood Rat, Neotoma micropus

By R. B. EADS and B. G. HIGHTOWER, State Department of Health, Austin, Texas

Mites taken from nesting material of the Baird wood rat, *Neotoma micropus*, represent a new species of the genus *Androlaelaps* and the description is presented in this paper.

Androlaelaps johnstoni, n. sp.

Female. (Plate I, Figs. A, B, C, D.) A light brown mite, small for this genus, elongate-oval in outline and with faint shoulders. Average measurements in microns of 3 specimens: total length, exclusive of gnathosoma, 528; total width of body at widest point, 349; length of dorsal plate, 494; width of dorsal plate, 308; length of genitoventral plate to the anterior border of the anal plate, 43. The setae are of moderate length and thickness.

Sternal plate reticulate, slightly concave on anterior margin, posterior margin almost truncate. Lateral margins strongly

lxii]